Written Testimony for the Record

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Subcommittee on Labor, Health and Human Services, Education, and Related Agencies House Appropriations Committee

The Radiological Society of North America (RSNA) is a non-profit organization representing over 52,000 medical imaging professionals in more than 150 countries around the world. Our mission is to promote excellence in patient care and healthcare delivery through education, research, and technological innovation. RSNA appreciates the opportunity to submit testimony to the House Appropriations Committee in strong support of robust and sustained federal funding for medical research. We strongly support at least \$51.3 billion for the National Institutes of Health (NIH) for fiscal year (FY) 2026, which would represent a \$4.2 billion, or 9.0%, increase over the final FY 2025 funding level.

Robust federal support for medical research improves health for all Americans. Investments in medical imaging research—largely funded through the NIH, the National Institute of Biomedical Imaging and Bioengineering (NIBIB), and other federal agencies—have improved early disease detection, advanced precision medicine, and transformed patient care. NIH-supported research is the foundation for nearly every diagnostic, intervention, treatment, and cure in use in medical practice today. Continued support for research is essential to the future of medical innovation and ensuring the best possible health outcomes for patients.

Medical imaging has become one of the most powerful diagnostic and therapeutic tools in modern medicine, allowing physicians to detect diseases earlier, personalize treatments, and improve patient outcomes. Many of the most significant advancements in imaging technology—and concomitant improvements in disease detection and treatment—have been directly supported by federally funded research, including:

- MRI and CT technological advancements NIH-supported research has increased resolution, speed, and accuracy in imaging modalities like magnetic resonance imaging (MRI) and computed tomography (CT), allowing for earlier and more precise detection of cancers, stroke, and cardiovascular disease, among other conditions.
- **Molecular and functional imaging**—advances in positron emission tomography (PET) and molecular imaging, driven by NIH-supported foundational research, now allow physicians to visualize cellular activity in real time, leading to earlier diagnosis of diseases like Alzheimer's, Parkinson's and cancer.

 Ultrasound and non-invasive imaging – NIH funding has led to major breakthroughs in portable non-invasive ultrasound technology which has expanded access to safe and cost-effective medical imaging and improved diagnostics in underserved regions and communities.

Artificial Intelligence (AI) is transforming medicine and has the potential to dramatically improve diagnostic accuracy, enhance efficiency, and improve patient health outcomes. Radiology and medical imaging are among the most data-intensive fields in medicine, and radiology has experienced the highest rate of AI tool development and deployment in medicine—of the approximately 1,000 AI algorithms cleared by the Food and Drug Administration (FDA), more than 76 percent are designed for radiological applications. These AI-based tools have the power to enhance disease detection, reduce diagnostic errors, increase efficiency and throughput in imaging protocols, and optimize treatment planning. RSNA publishes six peer-reviewed journals that feature groundbreaking medical imaging research that advances medical practice. Given the immense promise of AI, and the speed at which AI-related research and development is advancing, RSNA's Radiology: Artificial Intelligence journal has rapidly become a trusted source of cutting-edge innovation valued by researchers, healthcare professionals, and AI product manufacturers. For example, recent work published by RSNA in our journal Radiology, reports on a fully automated AI pipeline for the comprehensive evaluation of chest CT scans, an innovation with the potential to transform lung cancer screening and provide personalized medical care.1

Federally funded research through NIH, NIBIB, and the National Science Foundation (NSF) has been instrumental in the development of AI applications, such as:

- Al-Assisted Disease Detection Al algorithms can identify subtle signs of cancer, stroke, and neurological disorders in medical images with accuracy comparable to human radiologists, often detecting abnormalities at earlier stages when treatment is most effective.
- Predictive Analytics and Precision Medicine AI models trained on large imaging datasets can help predict disease progression, treatment response, and patient outcomes, enabling more personalized and targeted therapies designed for the individual undergoing treatment.
- Al in Emergency and Rural Settings Al-powered imaging tools can provide real-time triage in emergency departments and expand access to high-quality diagnostics in underserved rural communities, helping to address healthcare disparities.
- Workflow Optimization and Efficiency Al-driven automation reduces administrative burdens and image interpretation times, allowing radiologists to focus more on complex cases and patient care.

¹ Marcinkiewicz AM, Buchwald M, Shanbhag A, et al. Al for multistructure incidental findings and mortality prediction at chest CT in lung cancer screening. *Radiology* 2024;312(3):e240541.

While AI holds immense promise, realizing its full potential in medical imaging and healthcare will require sustained federal investment to address critical challenges, including ensuring AI safety, accuracy, and reliability; appropriate integration of AI tools into clinical decision-making; advancing AI regulatory science and oversight; expanding AI infrastructure and the AI-driven healthcare workforce; and ensuring AI is deployed in medicine fairly.

Beyond the direct benefits to patient care, medical imaging research is also an important driver of economic growth and technological innovation. According to United for Medical Research, in FY 2024 NIH research funding supported 407,782 jobs and produced \$94.6 billion in economic activity nationwide, or \$2.56 in economic activity for every \$1 of research funding supported by the agency.² NIH-funded medical research supports economic activity and jobs directly and indirectly through companies that provide the tools, equipment, and technologies needed to conduct cutting-edge research, and it produces spin-out and startup companies that attract private capital and other innovative intensive businesses.

Sustained and robust NIH funding is critical to advancing our efforts to characterize and treat a range of diseases and disorders—every American knows someone, or is themselves personally impacted, by one of the conditions under careful study by the NIH. NIH has received longstanding bipartisan support that has directly contributed to the agency's ability to support this lifesaving research. However, as a result of the current Administration's ongoing policy changes the U.S. biomedical research enterprise is at an inflection point. RSNA strongly urges Congress to ensure that NIH has the resources it needs for U.S. biomedical research to continue to be a global standard for excellence and drive progress in medical innovation. Our continued preeminence requires both financial investment and support for human capital, including extramural scientists and NIH expert staff to execute on the agency's research priorities.

RSNA thanks the House Appropriations Committee for your commitment to advancing medical research. Federal investment in medical imaging research has saved lives, improved diagnostic accuracy, and revolutionized patient care. Continued support of the NIH through sustained and robust funding is essential to drive the next generation of imaging breakthroughs, support economic growth, and maintain U.S. leadership in biomedical innovation. RSNA joins the Ad Hoc Group for Medical Research in recommending at least \$51.3 billion for the NIH base appropriation for fiscal year (FY) 2026.

² United for Medical Research, 2025 Annual Economic Report: NIH's Role in Sustaining the U.S. Economy; https://www.unitedformedicalresearch.org/annual-economic-report-toolkit/